8. (Amended) A method for operating an optically recordable disk memory comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said optical disk through said hard-carbon coating;

G2 wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

15. (Amended) A method for operating an optically recordable disk memory comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said substrate through said

G3 hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

22. (Amended) A method for operating an optically recordable disk memory comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a

G4 hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less;

G4 cont.

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

29. (Amended) A method for operating an optically recordable disk memory comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said optical disk through said hard-carbon coating;

G5

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

36. (Amended) A method for operating an optically recordable disk memory comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said optical disk through said hard-carbon coating;

G6

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

43. (Amended) A method for operating an optically recordable disk memory comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a

G7

hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

50. (Amended) A method for operating an optically recordable disk memory comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

57. (Amended) A method for operating an optically recordable disk memory comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

58. (Amended) A method for operating an optically recordable disk memory comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

59. (Amended) A method for operating an optically recordable disk memory comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

G9 cont.

irradiating a visible light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

60. (Amended) A method for operating an optically recordable disk memory comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or

less;

G9. cont. wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

68. (Amended) A method of operating an optical magnetic disk comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

69. (Amended) A method of operating an optical magnetic disk comprising the steps of:

G10 introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less,

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

70. (Amended) A method of operating an optical magnetic disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

71. (Amended) A method of operating an optical magnetic disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

79. (Amended) A method of operating an optical magnetic disk comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

80. (Amended) A method of operating an optical magnetic disk comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less,

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

81. (Amended) A method of operating an optical magnetic disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said substrate through said hard-carbon coating;

G11 cont.

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

82. (Amended) A method of operating an optical magnetic disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less;

wherein said hard-carbon coating contains silicon and phosphorus at a

G11 cont. concentration at 20 atomic% or less.

90. (Amended) A method of operating an optical magnetic disk comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

91. (Amended) A method of operating an optical magnetic disk comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

G12 irradiating a visible light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less,

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

92. (Amended) A method of operating an optical magnetic disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

93. (Amended) A method of operating an optical magnetic disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

G12 cont.

irradiating a visible light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

101. (Amended) A method of operating a compact disk comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

G13

wherein said hard-carbon coating contains silicon and phosphorus.

102. (Amended) A method of operating a compact disk comprising the steps of:

introducing an optical disk having a surface protected by a protective film

comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less,

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

103. (Amended) A method of operating a compact disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said substrate through said hard-carbon coating;

G13 cont. wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

104. (Amended) A method of operating a compact disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

112. (Amended) A method of operating a compact disk comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

113. (Amended) A method of operating a compact disk comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

G14 irradiating a laser light having a wavelength of 700 to 800 nm onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less,

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

114. (Amended) A method of operating a compact disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or

less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

115. (Amended) A method of operating a compact disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

G14 cont.

irradiating a laser light having a wavelength of 700 to 800 nm onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

123. (Amended) A method of operating a compact disk comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

G15

wherein said hard-carbon coating contains silicon and phosphorus.

124. (Amended) A method of operating a compact disk comprising the steps of:

introducing an optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less,

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

125. (Amended) A method of operating a compact disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

G15 cont.

wherein said hard-carbon coating contains silicon and phosphorus.

126. (Amended) A method of operating a compact disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

134. (Amended) A method of operating an optical disk comprising the steps of:

introducing said optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

135. (Amended) A method of operating an optical disk comprising the steps of:

introducing said optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less,

G16

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

136. (Amended) A method of operating an optical disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a semiconductor laser light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

137. (Amended) A method of operating an optical disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

G16 cont. irradiating a semiconductor laser light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

145. (Amended) A method of operating an optical disk comprising the steps of:

introducing said optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein

G17 said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

146. (Amended) A method of operating an optical disk comprising the steps of:

introducing said optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less,

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

147. (Amended) A method of operating an optical disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

G17

148. (Amended) A method of operating an optical disk comprising the steps of:

Cont.

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a laser light having a wavelength of 700 to 800 nm into said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

156. (Amended) A method of operating an optical disk comprising the steps of:

G18

introducing said optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

157. (Amended) A method of operating an optical disk comprising the steps of:

introducing said optical disk having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said optical disk through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less,

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.

158. (Amended) A method of operating an optical disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

irradiating a visible light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is 30/mm^2 or less, wherein said hard-carbon coating is an outermost layer of the disk, and wherein said hard-carbon coating contains hydrogen;

wherein said hard-carbon coating contains silicon and phosphorus.

159. (Amended) A method of operating an optical disk comprising the steps of:

introducing a substrate made of an organic resin or an industrial plastic material, said substrate having a surface protected by a protective film comprising a hard-carbon coating having a thickness of 500Å or less;

G18 cont. irradiating a visible light onto said substrate through said hard-carbon coating;

wherein the number of pin-holes in said hard-carbon coating is $30/mm^2$ or less;

wherein said hard-carbon coating contains silicon and phosphorus at a concentration at 20 atomic% or less.